

Generating Evidence for a Comprehensive Support Package to Stabilize Youth Trajectories out of Homelessness: A Tertiary Prevention Strategy - REB Protocol Version 3.0, May 30, 2018

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REB Protocol

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"Generating Evidence for a Comprehensive Support Package to Stabilize Youth Trajectories out of Homelessness: A Tertiary Prevention Strategy"

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Overview

This project builds upon initial proof of concept work examining the optimal set of supports for youth who have recently exited homelessness – an intervention comprised of mental health and peer supports alongside transitional case management. This collaborative model will be tested as a proof-of-concept in Thunder Bay with Indigenous youth and a trial will be conducted in Toronto to optimize and determine the effectiveness of the existing model of support.

Background

Homelessness and Risk Literature

Child and youth homelessness is a major global problem with estimates of at least 150 million internationally (Unesco, 2014). It is a pervasive problem, and one not relegated to low income contexts (e.g., 1 million – United States (Kidd & Scrimenti, 2004); 40,000 Canada (Gaetz, Donaldson, Richter et al., 2013). Many determinants of youth homelessness have been posited, the most prominent of which are child maltreatment (Karabanow, 2004; Kidd, 2006), poverty (Public Health Agency of Canada, 2006), and mental illness (Craig & Hodson, 1998; Karabanow, Hopkins, Kisely, et al., 2007), though the lack of longitudinal research greatly hampers any conclusive identification of risk weightings and interactions.

Once on the streets the exposure to risks to physical and mental health are great, as evidenced by high mortality rates due in large part to suicide and drug overdose (Roy, Haley, & Leclerc et al., 2004; Roy, Haley, & Boudreau et al., 2009). Though youth may be highly creative and resilient in their survival efforts (Karabanow, 2008; Kidd & Davidson, 2007; Rew & Horner, 2003), the outcomes for most over time is poor. The response to youth homelessness has been, historically, highly variable and at a population level ineffective, if the steadily increasing numbers of such youth in recent decades can be taken as an indicator (Kidd & Scrimenti, 2004). In the last 100 years in North America, for example, frameworks for intervention have included eugenics, social reform, psychiatric treatment, and criminalization (Kidd, 2012). At present, dominant approaches are crisis response in the form of general drop-in and emergency shelter service and a criminal justice system response in the form of ‘safe streets’ legislation (Slesnick, Dashora, & Letcher et al., 2009).

Evidence surrounding the effectiveness of these interventions is generally lacking. What little evidence that does exist paints an unclear and generally unpromising picture. While some specific interventions show promise, in general, models that are effective with other marginalized populations such as enhanced case

management, motivational interviewing, and housing first approaches, have not demonstrated clear benefit (Altena, Astrid, & Sonja et al., 2010; Slesnick, et al., 2009).

Transition from Homelessness Literature

Relative to the large body of work examining the risks associated with pathways into youth homelessness and the risks associated with living on the streets, very little work has concentrated on pathways out of homelessness. There exist some cross-sectional qualitative investigations conducted with youth considering or beginning to engage in the transition process. This work has highlighted the challenges associated with addictions, trauma, discrimination, unemployment, and breaking ties with street culture and street friends (Karabanow, 2008). Some other work has suggested the importance of self-concept in these transitions, with how youth identify with either street or mainstream contexts and cultures being important to their motivation to exit homelessness (Kidd & Davidson, 2007).

There are also several longitudinal quantitative studies which have engaged homeless youth and tracked days housed for up to two years (Barber et al., 2005; Slesnick et al., 2008a;2008b; Milburn et al., 2009; Rosenthal et al., 2007; Tevendale et al., 2011; Roy et al., 2014). While the methods and findings of these studies vary considerably, there are some consistent themes. The most consistent finding is that drug and alcohol abuse reduced the number of days housed (Rosenthal et al., 2007; Slesnick et al., 2008a; Tevendale et al., 2011; Roy et al., 2014). Number of days housed has also shown positive associations with connections with peers and family (Slesnick et al., 2008b; Milburn et al., 2009), less risk behavior (Slesnick et al., 2008a), being female (Slesnick et al., 2008a), past and current engagement in education (Milburn et al.,2009; Roy et al., 2014), being younger, and having been homeless for a shorter period of time (Tevendale et al., 2011). Somewhat less intuitive are findings that youth who had left home involuntarily (i.e., “throwaways”) were more likely to find housing (Tevendale et al., 2011) as were youth experiencing mental health problems (Roy et al., 2014). Interpretations of these latter findings fell along the lines of the self-concept work of Kidd & Davidson (2007), suggesting that pathways out of homelessness depend upon how a youth positions themselves relative to home and street contexts. For example, emotional distress might indicate a youth who feels that they do not belong or fit in on the streets and possesses greater motivation to find housing.

This recent longitudinal work that tracked cohorts of homeless youth has been extremely valuable in identifying factors that are related to trajectories out of homelessness. However, these studies have some shortcomings. These include very high attrition rates and, most significantly, that self-reports of days housed is a narrow measure if the intent is to capture the stability of trajectories out of homeless spaces, social contexts, and self-concepts (Frederick et al., 2014).

Work Directly Informing this Proposal – Understanding the Process

In a recent SSHRC funded two-site study focussing on Toronto and Halifax, Kidd, Frederick, Karabanow and colleagues used a mixed methods longitudinal design to examine pathways out of homelessness across a diverse group of 51 youth (Frederick et al., 2014; Karabanow et al., 2014; Kidd et al., 2016). Unlike previous work, this study focussed upon youth who had recently achieved housing stability and involved an in-

depth examination of challenges to and facilitators of stability - defined in a manner considerably broader than days in housing.

Some aspects of the findings of this study mirrored previous work. It was found that in the one year period of study, most participants were not making substantial gains in achieving health and stability. Of the 51 participants, 24% experienced a loss of stable housing over the year, and for all participants pathways were protracted and complex with significant challenges in securing decent quality housing, employment, and engagement in education. Over the year there was no significant improvement in community integration (including both psychological and community activity domains), mental health and quality of life declined and showed erratic courses, and hope declined. It was found that having a community support worker, living in a supported housing context, and having a hopeful perspective mitigated threats to housing stability such as a lack of employment and criminal justice involvement. Furthermore, it was found that the more protracted the process of transitioning out of homelessness, the greater the difficulty youth had in achieving a decent quality of life and sense of engagement in non-homeless communities, relationships, and self-concepts. Developing a sense of purpose and meaning was found to be essential to this process, with youth finding that housing had been 'oversold' in terms of benefits. Many struggled greatly as they experienced social isolation, complex trauma symptoms, poor physical health, and other challenges.

Despite these myriad challenges, there were also many successes and opportunities. Tremendous resilience was observed as youth persisted in the face of many challenges and stayed away from street contexts, addressed addictions, and engaged in a very positive way in tasks from the mundane to more complex navigations of employment and re-establishing relationships with family.

This study, along with previous work, had several clear practice implications which were both directly stated by youth and supported by quantitative analyses:

1. Having a sense of purpose, meaning, and engagement in community are important to sustaining hope and to avoiding a drift back into homelessness.
2. Concrete, tailored, and ongoing information and support is needed in areas such as independent living skills, navigating systems of support and criminal justice.
3. Social engagement with non-street involved people is essential to developing identity and sustaining motivation, but many youth have limited opportunities for finding such engagement.
4. A substantial proportion of youth struggled with significant psychological concerns, particularly trauma, that impacted all domains of their life including relationships, motivation, stress management, and substance use.
5. Most participants felt that support in these areas was difficult to access or non-existent, and many were reluctant to access the modest amount of support available through homeless drop-ins and shelters for fear of having their addictions triggered or falling back into old negative patterns.

Work Directly Informing this Proposal – Intervention Feasibility

In response to the challenges outlined above, and with the support of a grant from the Ontario Ministry of Child and Youth Services, we developed and tested a tertiary prevention strategy called the Housing Outreach Program Collaborative (HOP-C) which launched in the summer of 2015. In this approach we focused on collaborations and interventions that have the greatest potential to be effective with this population. We brought together partners from a number of sectors in the GTA and have tested a 3-pronged set of supports (intervention described in detail in the methods):

- Transitional Case Management
- Mental Health Interventions: Group, individual, family
- Peer Support

This is an intensive, 6-month critical time intervention – one that jointly addresses many points of vulnerability (mental health crises, housing instability, justice involvement) while fostering resilience and connection with resources in employment, education and training domains. It is unique in both content comprehensiveness and integrated process of delivery. Also important was the development of a collaborative and responsive partnering process, to facilitate effective organizational interfaces and seamless service integration so participants can experience a tailored and coherent set of supports. With CAMH, the Centre for Mindfulness Studies, Covenant House, LOFT, and SKETCH at the service level and the Wellesley Institute leading evaluation, we have carefully attended to a collective impact framework.

This initiative has proven feasible and is demonstrating good outcomes – with excellent youth engagement, reports of lower social isolation, improved mental health, and engagement with resources, and spin-off benefits of closer collaboration between organizations. We successfully met the target of youth engagement, with a total of 31 youth participating, minimal attrition (n=2), and we observed no indications that HOP-C resulted in risk of any form, both with respect to the intervention itself and the mixed methods research methodology. This promising feasibility work formed the foundation from which we were successful in obtaining a grant from the Local Poverty Reduction Fund to support the study described in this proposal.

Current Proposal

The next steps for this program are to test its feasibility in expanded settings and to unpack which elements are driving effectiveness. These steps are crucial to scale the program provincially and to break the cycle of homelessness that systemically wastes resources and individually erodes health, wellbeing, and potential. This work will:

1. Assess how the success of the Toronto model will transplant to a smaller and less-resourced centre (Thunder Bay), and how it will culturally adapt to an Indigenous youth population.

2. Determine through a randomized trial in Toronto if the positive outcomes we are observing are due solely or primarily to transitional case management and if the additional peer and mental health components are necessary.

Engaging in intensive, tertiary prevention shows clear promise in disrupting a cycle of poverty and marginalization at a critical time – if proven and scaled a key driver of chronic homelessness would be addressed.

Research Questions

The objective of this two-part project is to examine the effectiveness and transferability of the Housing Outreach Program-Collaboration (HOP-C) transitional intervention. HOP-C has proven to be feasible with promising outcomes in the Toronto proof-of-concept work currently underway. The next stage is to consider two points of inquiry, both of which are essential if this work is to be scaled provincially.

This study was designed to address 2 questions:

1. Is HOP-C transferable with respect to feasibility and outcome to smaller, less resourced urban settings, and can it be culturally adapted for Indigenous youth?
 - It is hypothesized that HOP-C model will prove transferable and feasible in one such context.
2. Are the benefits of the complex HOP-C intervention with all components in place greater than transitional case management in isolation?
 - It is hypothesized that the full model will provide benefit in domains of housing stability, mental health, and quality of life that are significantly greater than case management alone.

We have data in hand from our recent national work in the area which provides data on 'treatment as usual' or the outcomes that attend typically available supports. The proposed trial will unpack benefit and be essential in economic and viability arguments to be made going forward.

Methods

Research Question 1: The Thunder Bay Site

To address the first question, we have chosen Thunder Bay as the study site. This city is ideal for our evaluation because it enables a consideration of a mid-sized urban environment and is particularly relevant for Indigenous homeless youth, being the northern hub to which many youth from Indigenous communities gravitate upon becoming homeless (15). This study will focus on qualitative and quantitative indicators of feasibility with some probing of quantitative outcome measures. Outcome indicators are examined for the purposes of feasibility (if they seem to be capturing change referencing qualitative descriptions of impact) and

will be interpreted cautiously as this is a complex intervention with uptake of components unlikely to be uniform.

Youth Participants

The strength of this evaluation – like at our Toronto site in the original feasibility study – lies in a triangulation of quantitative and qualitative sources of data. Participants will be 25 formerly homeless individuals between the ages of 16 and 26 who have obtained secure housing in a time period up to 12 months previously (24 years is the age cut-off for most homeless youth services - allowing for 12 months and some additional leeway after exiting homeless youth services leads to an upper limit of 26 years). All participants will self-identify as being of Indigenous (First Nations, Inuit, Metis) heritage. Past experience with homelessness is operationalized as 6 or more months (not necessarily consecutive) of homelessness (no housing, in shelters, or transiently residing with others "couch surfing"). Secure housing refers to either supported or independent housing. We are proposing an upper limit of 12 months housed as our previous work (Kidd et al., 2016) suggests this is well within the time period in which there remains a need for support and transitions are tenuous, and to facilitate recruitment within the study timeframe by having an adequate pool of potential participants.

The original HOP-C study findings suggest that approximately 10% attrition is to be expected. Accordingly, having 20-25 individuals complete the intervention would be adequate to assess feasibility qualitatively (Sandelowski, 1995), likely with sufficient power to assess change for the group as a whole via a paired sample t-test and to detect medium to large effect sizes.

All participants will be recruited through Dilico Anishinabek Family Care (DAFC), with whom the CAMH Provincial System Support Program has a longstanding partnership. DAFC provides a range of individual, family, and community programs and services in support of Anishinabek people, and is of particular relevance to the hundreds of youth in Thunder Bay who are the focus of this project. DAFC has a range of strategic partnerships locally which will be leveraged to engage recently housed youth and will be the primary location from which HOP-C-North would be based. At DAFC, Assistant Director of Mental Health and Addictions Tina Bobinski will lead local coordination, supported in the local PI role (and clinical supervisory role) by Dr. Christopher Mushquash, Canada Research Chair in Indigenous Mental Health and Addiction, Associate Professor in the Department of Psychology at Lakehead University, and the Northern Ontario School of Medicine, and Clinical Psychologist at DAFC. This arm of the study will be concurrently reviewed by the Lakehead University REB. Youth workers at DAFC will approach current and former clients who meet eligibility criteria to inform them about the study (see appendix for script) with their being consented in by study staff. A rate of recruitment of 1/week would meet the study timeline and is feasible with respect to the numbers of potential participants (over 100) available at any given time. We will anonymously track the number of refusals at the level of approach by youth worker and refusal or failure to meet criteria. For the latter we will also note the reason (e.g., outside of age range, not in secure housing, etc.).

HOP-C Intervention

The 6-month intervention has two major components that have been designed to address the core needs identified in previous research in an accessible, cost-effective, and scalable way – one focussing on general support and information needs and a second focussing on mental health. These two aspects of the intervention are offered concurrently in the 6-month period. In the feasibility study it was found that intensive support over a six month period served the objective of stabilizing participants in this critical time – solidifying connections with existing resources into which youth are bridged at the end of the six month period.

General Support and Information

Youth who have recently exited homelessness, as noted in the review, face considerable challenges in navigating systems (e.g., financial supports, criminal justice, housing) and addressing daily tasks such as budgeting. These young people also often feel isolated and disengaged at social and community levels having distanced themselves from homeless social networks. Additionally, youth who have a community support worker fare better in mental health and community stability domains (Kidd et al., 2014), most youth value information provided by peers who have greater experience, and most who have transitioned out of homelessness are reluctant to come to services located in homeless youth service spaces (Frederick et al., 2014; Kidd et al., 2016). To address these needs for information and support we would provide:

1. **Access to a transition-focused case manager:** First, each participant will be provided with a transition-focused community support worker who will assist in areas ranging from general support and encouragement to assistance in navigating relevant systems. They will have weekly contacts with participants by phone, informal contact via text and email, and at least twice per month will visit the participant where they are residing. It is expected that all participants will engage a community support worker. The transitional case managers hired into this role will be highly experienced in case management for youth, and will be supported by DAFC as an organization and team with participants registered as clients at DAFC.
2. **Access to peer support:** In the model to be tested here we would (i) ensure that the peers are properly supported and supervised to ensure the quality of their work and their own mental health and, (ii) peers will have successfully sustained housing continuously for no less than 2 years and have successfully engaged in employment and/or formal education. There will be 2-3 Peers in the study. Peers will run drop-in style events/workshops every week with the aim that there will be a variety of interests represented (art, sports, video games, activism, etc.). They will also facilitate monthly social outings. Peers will be based out of the DAFC cultural service space and will be provided with the support of an experienced peer programming coordinator. They will work as a team and meet at least weekly to coordinate and review activities. The second element of Peer roles will involve, as a group, producing online content (e.g. short videos, blogs, etc.) on a range of topics (e.g., finding work, dealing with troublesome landlords, low cost entertainment), with topics developed in collaboration with participants.

This content will be made accessible to all study participants through a web portal and help extend the reach of the intervention. As with case management, the activities of the Peers will be documented on a weekly basis.

Mental Health

As described in the review, key aspects of the challenges faced by recently homeless youth include loneliness, maintaining hope, psychological distress, and challenges establishing a sense of meaning, purpose, and place through the transition process. To address these challenges we offer:

1. **Access to wellness-oriented group psychotherapy:** Participants will be offered access to a weekly 90 minute group intervention hosted at DAFC. The group content has several components informed by research evidence and will be co-facilitated by a doctoral or postdoctoral level Clinical Psychology Trainee supervised by Dr. Mushquash. The group will be run in an open format, allowing for flexible attendance, with enough groups running concurrently to ensure no more than 6-8 participants/group. An open rather than closed format is proposed based upon our experience in the feasibility study which indicated that the array of challenges experienced by these youth often precludes routine and consistent attendance and requires a flexible model. Should demand for the group exceed 6-8 youth per session a second group will be introduced to provide capacity.

Sessions will have two components:

- a. Time would be given in all group sessions for a **flexible narrative exploration of past and present challenges and successes** following the practice principles of process-oriented group psychotherapy (Yalom, 2005). Challenges will be flexibly addressed in the group through mutual learning and support to as great an extent as possible.
- b. The second component builds upon research evidence suggesting that among at-risk youth and individuals experiencing complex trauma, **emotion regulation, interpersonal effectiveness, and mindfulness interventions such as those extensively investigated in Dialectical Behaviour Therapy (DBT) are feasible and effective** (Cloitre et al., 2011; Kerrigan, 2011). All sessions would involve a mindfulness component (incorporating both formal and informal mindfulness strategies). Mindfulness-based interventions have previously been demonstrated as feasible with homeless youth populations (Grabbe et al., 2012). Emotion regulation, distress tolerance/crisis management and interpersonal effectiveness components would be applied in a manner addressing the specific needs of group members and would be based upon DBT skills (Linehan, 2014). Other components, developed over the course of our feasibility study based on participants' expressed needs, include self-stigma related to homelessness and mental health, trauma psychoeducation, anger management/conflict resolution, and healthy relationship groups, as well as practical skill workshops on topics of short-and long-term goal setting, managing

money, and time management. All approaches will be delivered in terms of process and the framing of content in a culturally relevant manner. As a point of reference, in the original study 23 (75%) participants attended group at least once, and approximately 15 (50%) participants attended multiple times or regularly.

2. **Access to family counselling:** There is evidence to suggest that reconnecting with family members facilitates successful transitions and addresses psychological distress. Participants will be given access to up to 3 family sessions on an as needed basis. These sessions would build upon the interpersonal effectiveness skills addressed in the group sessions. These family sessions will be provided by the postdoctoral level clinical psychologist. In the original study in only 2 instances was this aspect of the service provided.
3. Finally, while not a formal component of the intervention, the **Postdoctoral Fellows will have the capacity to provide individual psychotherapy to some participants** should levels of distress or risk suggest additional supports are needed. This in and of itself will likely prove informative with respect to intervention design and assessment the potential of and need for individual interventions as an adjunctive component. In the original study, 10/31 youth have taken advantage of this aspect of the service.

Needs Post-Intervention

Post HOP-C intervention, participants needing further support will continue to have access to case management at DAFC among other DAFC services and will also be supported in engaging relevant local supports in education, employment, cultural and leisure domains.

Measures

Qualitative

1. The youth participants will be interviewed on **3** occasions using a semi-structured interview format (see appendix for the interview framework; interviews done in person with participants paid \$25 plus 2 transit tokens for each).

Interview 1: Participants will be asked in broad terms about their history of homelessness and their past experiences in trying to transition out of homelessness, probing successes, strengths, and sources of adversity. We will also examine their expectations about the intervention – what they hope to achieve and any reservations they might have. The emphasis of these interviews is upon the transition out of homelessness process.

Interview 2: Taking place at month 6 (or, for those who drop out, following their decision to do so) this interview will focus on their progress with transition, probing areas including housing, sense of community,

social factors, poverty, criminal justice involvement, and employment. This interview will also carefully examine their experience in the various aspects of the intervention – probing for each what is seen as helpful and not helpful, perception of impacts, and thoughts about how they might be improved. Expectations for the future will also be examined.

Interview 3: Participants will be interviewed approximately 6 months after their T2 interview. This 40 minute qualitative interview will focus on longer term trajectories in terms of housing, employment, education, well-being, and overall stability.

2. **Caseworkers, peers, service coordinators, Psychologists, managers** will be interviewed immediately following the completion of the intervention. Interviews will be conducted in a complementary manner probing aspects of the intervention that seemed effective, challenges, and areas requiring improvement (see appendix). These individuals will be recruited by the study RA, their choice to participate or not will be kept confidential from the rest of the team, and data anonymized in any reports or other communications formal and informal.
3. **Detailed notes will be taken at all planning and supervisory meetings** which will be subject to analysis to track the process of implementation and collaboration.

Quantitative

Descriptive measures: A detailed demographic profile will be developed including homelessness history (timeline), age, gender, ethnicity, sexual orientation/identity, housing arrangement, school and employment history, characteristics of neighbourhoods and services accessed, and interactions with institutions such as the criminal justice system and child protection. We will also carefully track attendance and time spent in the various aspects of the intervention.

Scale measures: We will also employ quantitative scales that describe participants' community participation, quality of life, mental health, hope, resilience, and social support. Each of these domains have arisen in previous qualitative and quantitative work as being critical in youths' consideration of exiting the streets (Karabanow, 2006; 2008; Kidd & Davidson, 2007; Kidd et al., 2014; 2016). Quantitative measures will be collected at baseline and at 6 months. To accommodate possible low levels of literacy, the interviewer will give the youth the option to either record the answers themselves or via the interviewer.

Community integration: Behavioural and psychological aspects of community integration will be examined using the 11-item Community Integration Scale (Stergiopoulos, Gozdzik, & O'Campo et al., 2014) which taps psychological (belongingness) and behavioral (activities) components of community participation. This measure was developed for homeless populations and proved psychometrically sound in previous work with formerly homeless youth, and is answered with a mix of dichotomous and 7 point Likert scale questions. **Quality of life:** This dimension will be measured with the brief World Health Organization Quality of Life Scale (WHOQOL-BREF) which has good to excellent psychometric properties of reliability and performs well in tests of validity (Skevington, Lofty, O'Connell, 2004).

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Subjective Housing Stability: Along with a consideration or change in housing type, we will measure subjective housing stability using a scale developed and validated with transitional homeless youth populations. This is the Housing Security Scale, which contains 13 items on a 5 point likert scale (Frederick et al., 2014).

Mental health: Mental health (and addictions) will be measured using the GAIN Short Screener (CAMH Modified) (Rush et al., 2013), which includes 6 internalizing items and 5 addictions items answered on a 5 point scale. This measure has demonstrated excellent psychometric properties with youth and allows for comparison with national norms. A cognitive measure of hope will be employed (Snyder, Harris, Anderson, & Holleran et al., 1991). This self-report questionnaire contains 12 questions that are each scored on an 8 point Likert scale and has likewise demonstrated excellent validity and reliability findings. Resilience will be measured using the 14-item Resilience Scale (RS-14 Wagnild, 2010). This scale has excellent psychometric properties across a range of populations and has demonstrated good reliability among homeless youth populations. Items are answered on a five-point scale with responses ranging from strongly agree to strongly disagree

Social Support: We will use a modified version of the MOS Social Support Survey (Sherbourne and Stewart, 1991) to measure social support. This survey measures 3 dimensions of social support: emotional/informational, tangible, and affectionate. It is a 15-item 5-point Likert-type scale. The scale shows good construct validity and reliability. Because the survey was originally designed for use with chronically ill patients we are (as have others with this population) modifying the 4 questions on tangible support to better reflect this population. Following other research with homeless populations we focus on the availability of people to lend \$100, accompany to an appointment, provide food or a place to stay, and help with daily chores if the participant gets sick (Hwang et al, 2009).

Goal Attainment: Recognizing the limitations of scale measures for capturing change among marginalized individuals with complex needs, we will use Goal Attainment Scaling. Goal Attainment Scaling (GAS) is a sensitive measure of progress on individually defined goals that has demonstrated good reliability and validity with marginalized populations (Hurn et al., 2006). Goal attainment scaling involves the setting of 3-5 goals, each operationalized on a 5-point scale. Goals are individualized to the client and assessment of progress are determined through consensus of the client and case manager.

Access to services: We have developed a brief set of questions to assess service needs and access. These questions focus on the services that the participants have access to outside of the HOP-C initiative, as well as questions assessing any gaps in service.

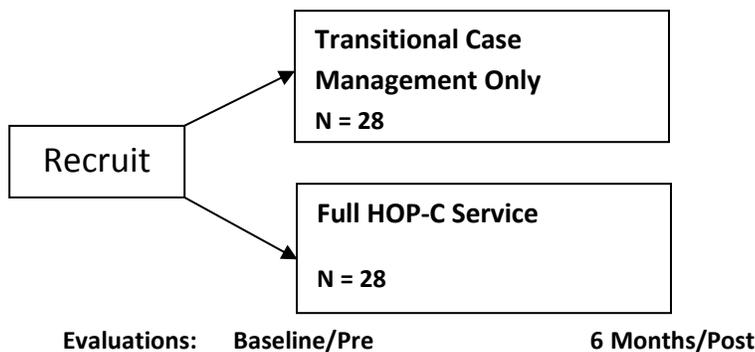
Analysis

As previously outlined, feasibility will be assessed primarily through the qualitative interviews with the quantitative measures being used for confirmation and triangulation. Our qualitative thematic analysis will involve the identification of core themes through structured coding (Boyatzis, 1998; Hsieh & Shannon, 2005) using NVivo Software. To maximize rigor, emerging categories will be discussed with the research participants. This process will deepen the discussion of the core emergent constructs and ensure better alignment of our

themes with the participants' meanings. We will also enhance rigor through the use of multiple coders—the transcripts will be coded and analyzed by the research analyst, with the postdoctoral student and PIs subsequently reviewing the transcripts, coded text, and theme structure. The quantitative findings will be used to strengthen study findings through triangulation (Creswell, 2003; Bryman, 2006). For example, the qualitative code structure will be examined as a function of demographic factors and quantitative scores (e.g., level of community participation; quality of life). Examining quantitative and qualitative findings concurrently will also inform the design of future trials by assessing the adequacy of the quantitative measures for capturing change in core themes. Quantitative measures will also be used to develop a detailed descriptive profile of this group of participants. Pre-post change in all scales will be examined using paired sample t-test analyses and effect size examined with Cohen's d. Some qualitative examination will also be made comparing mean change as a function of key demographics (e.g., gender) and degree of engagement in intervention components. Lastly, in resource utilization (both costs of service/youth and broader service/system contacts) will be quantified and examined through economic analysis to inform models of scale and viability.

Research Question #2 – The Toronto Site

To test the added benefit of the full HOP-C model as compared with case management in isolation, an open label, superiority randomized controlled trial will be used with the study site being Toronto.



Youth Participants

This study will follow most of the same core criteria for youth as the feasibility study in Thunder Bay. Participants will be 56 formerly homeless individuals between the ages of 16 and 26 who have obtained secure housing in a time period up to 12 months previously. Participation is not contingent upon ethnicity or cultural and demographic considerations. Enrollment will be opportunistic though may shift to purposeful should any substantial imbalances begin to emerge in the participant group (e.g., marked underrepresentation of males, overrepresentation of White youth) which would impact generalizability. Past experience with homelessness is operationalized as 6 or more months (not necessarily consecutive) of homelessness. Secure housing refers to either supported or independent housing. The original HOP-C study findings suggest that approximately 10% attrition is to be expected. Accordingly, having 28 individuals complete each arm of the intervention would by estimation be adequately powered to detect medium to large effect sizes.

In practice it is anticipated that the majority of participants will engage through LOFT community services, SKETCH, and Covenant House - the three principal partner organizations in this study. We will also approach organizations who engaged in the study in the feasibility phase, which included East Metro Youth Services, Eva's Place, Phoenix, and Satellite, Horizons for Youth, the Salvation Army, and YM/WCA. Youth workers at each site will approach current and former clients who meet eligibility criteria to inform them about the study (see appendix for script) with their being consented in by study staff. A rate of recruitment of 1-2/week would meet the study timeline.

Block randomization will be used to assign participants to either transitional case management only or the full HOP-C intervention. After randomization participants will complete written consent and baseline surveys.

Interventions

1. **HOP-C:** As noted above. As with the feasibility study, service provision will be provided by Loft and Covenant House for the transitional case management component, the peer component will be supported through Sketch Arts, and the mental health component will be provided by a post-doctoral fellow clinical psychologist and a mindfulness therapist from the Centre for Mindfulness Studies, supervised by Dr. Sean Kidd.
2. **Transition-focused case management:** Participants in this arm will be provided with a transition-focused community support worker who will assist in areas ranging from general support and encouragement to assistance in navigating relevant systems. They will have weekly contacts with participants by phone, informal contact via text and email, and at least twice per month will visit the participant where they are residing. It is expected that all participants will engage a community support worker. The transitional case manager hired into this role will be highly experienced in case management for youth.

Needs Post-Intervention

For both arms, post intervention, participants needing further support will continue to have access to case management at LOFT or Covenant House and will also be supported in engaging relevant local supports in education, employment, cultural and leisure domains.

Measures

For each of the two contacts youth participants will be paid \$25 plus 2 transit tokens.

Quantitative measures are described above will be applied pre-post intervention. .

Qualitative

1. **A post-intervention interview will take place for both the Transitional Case Management Only and HOP-C Full Service participants** at month 6 (or, for those who drop out, following their decision

to do so). This interview will focus on participants' progress in transition and will examine their experience in the various aspects of the intervention— probing for each what is seen as helpful and not helpful, perception of impacts, and thoughts about how they might be improved. Expectations for the future will also be examined.

2. **Caseworkers, peers, service coordinators, Psychologists, managers** will be interviewed immediately following the completion of the intervention. Interviews will be conducted in a complementary manner probing aspects of the intervention that seemed effective, challenges, and areas requiring improvement (see appendix). These individuals will be recruited by the study RA, their choice to participate or not will be kept confidential from the rest of the team, and data anonymized in any reports or other communications formal and informal.
3. **Detailed notes will be taken at all planning and supervisory meetings** which will be subject to analysis to track the process of implementation and collaboration.

Analysis

The data analysis strategy is as follows: (1) We will compare treatment and control groups at baseline on demographic and test variable measures using t-tests (continuous variables) and χ^2 analysis (categorical variables). (2) We will develop a descriptive profile of session attendance. We will consider the participant as having been exposed to the intervention if they have been engaged in one or more aspects of the intervention in at least 50% of the weeks (>12/24). (3) We will compare the intervention groups and the control group on changes in housing, education, employment, and other key outcome domains noted above from baseline to the end of the intervention period. Analysis of variance (ANOVA) will be used for this comparison with the above variables being the dependent measures and treatment groups being the independent variable. For these analyses, a time effect will reflect changes across groups over time, and the group-by-time interaction will reflect changes over time between the groups. For all analyses $p < .05$ will be used as the level of significance and effect size will be determined using Cohen's d. Qualitative post-intervention interviews will be analyzed, seeking to compare and contrast the experiences of the two participant groups, using the qualitative thematic analysis outlined in the Thunder Bay Site description.

Knowledge Translation/Exchange

Knowledge translation and exchange activities will include (i) peer reviewed academic papers published on key process and outcome findings related to both the trial and the test of feasibility for HOP-C North; (ii) a forum hosted by CAMH and the Wellesley Institute to share findings with key providers and, through online capacity, engage national and international audiences; (iii) a forum hosted by Dilico Anishinabek Family Care (DAFC) and other local partners to share findings with key providers, and through online capacity, engage national and international audiences (iii) development of a HOP-C manual; (iv) engagement of policy makers at all levels in discussions regarding taking HOP-C to scale from local to national levels.

Originality

To the best of our knowledge this study would be the first formal examination of an intervention for this population. It resonates with the increasing attention in policy and research given to transitional aged youth. Should this approach prove feasible, it will provide invaluable data with which we can go forward to conduct a large scale randomized trial. Furthermore, this project would be among the first to put forward one part of a potential solution to a major systemic failing of this marginalized population - the paucity of services available to see through the enormous efforts put in by all stakeholders to secure housing after traumatizing periods of homelessness. Without solutions such as these, we will continue to see resources and human potential wasted as youth cycle back into homelessness or experience inordinately protracted periods in a struggle to establish a life for themselves outside of homelessness.

References

- Altena A., Brilleslijper-Kater, S., & Wolf, J. (2010). Effective interventions for homeless youth: A systematic review. *American Journal of Preventive Medicine*, 38, 637-645.
- Barber, C.C, Fonagy P, Fultz J, Simulinas M, Yates M. (2005). Homeless near a thousand homes: outcomes of homeless youth in a crisis shelter. *Am J Orthopsychiatry*. 75: 347–355.
- Boyatzis, R. E. (1998). *Transforming Qualitative Information: Thematic Analysis and code Development*. Thousand Oaks, California: Sage.
- Brown, K.W. & Ryan, R.M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848.
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6, 97-113.
- Cloitre, M., Courtois, C., Charuvastra, A., Carapezza, R., Stolbach, B., & Green, B. (2011). Treatment of complex PTSD: Results of the ISTSS expert clinician survey on best practices. *Journal of Traumatic Stress*, 24, 615-627.
- Craig, T., & Hodson, S. (1998). Homeless youth in London: I. Childhood antecedents and psychiatric disorder. *Psychological Medicine*, 28, 1379-1388
- Creswell, J.W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Frederick, T., Chwalek, M., Hughes, J., Karabanow, J., & Kidd, S.A. (2014). How stable is stable? Defining and measuring housing stability. *Journal of Community Psychology*, 42, 964-979*.
- Gaetz, S., Donaldson, J., Richter, T., & Gulliver, T. (2013). *The State of Homelessness in Canada – 2013*. Toronto: Canadian Homeless Research Network Press.
- Grabbe, L., Nguy, S. & Higgins, M. (2012). Spirituality development for homeless youth: A mindfulness meditation feasibility pilot. *Journal of Child and Family Studies* 21, 925-37.
- Hsieh H.-F. & Shannon S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277-1288.
- Hurn, J., Kneebone, I., & Cropley, M. (2006). Goal setting as an outcome measure: a systematic review. *Clinical rehabilitation*, 20(9), 756-772.
- Hwang, S., Kirsst, M., Chiu, S., Tolomeczenko, G., & Kiss, A., et al. (2009). Multidimensional social support and the health of homeless individuals. *Journal of Urban Health*, 86, 791-803.
- Karabanow J. (2004). *Being Young and Homeless: Understanding how youth enter and exit street life*. New York, NY. Peter Lang Publishing INC.
- Karabanow, J., Hopkins, S., Kisely, S., Parker, J., Hughes, J., Gahagan, J., and Campbell, LA. (2007). Can You Be healthy on the Street?: Exploring the Health Experiences of Halifax Street Youth. *The Canadian*

Journal of Urban Research, 16, 12-32.

- Karabanow, J. (2008). Getting off the Street: Exploring Young People's Street Exits. *American Behavioral Scientist*, 51, 772-788.
- Kerrigan, D., Johnson, K., Stewart, M., Magyari, T., Hutton, N., & Ellen, J. et al. (2011). Perceptions, experiences, and shifts in perspective occurring among urban youth participating in a mindfulness-based stress reduction program. *Complimentary Therapies in Clinical Practice*, 17, 96-101.
- Kidd, S.A., & Scrimenti, K. (2004). The New Haven homeless count: Children and youth. *Evaluation Review*, 28, 325-341.
- Kidd, S.A. (2006). Factors precipitating suicidality among homeless youth: A quantitative follow-up. *Youth & Society*, 37, 393-422.
- Kidd, S.A., & Davidson, L. (2007). "You have to adapt because you have no other choice.": The stories of strength and resilience of 208 homeless youth in New York City and Toronto. *Journal of Community Psychology*, 35, 219-238.
- Kidd, S.A. (2012). Seeking a Coherent Strategy in our Response to Homeless and Street-Involved Youth: A Historical Review and Future Directions. *Journal of Youth and Adolescence*, 41, 533-543.
- Kidd, S.A., Frederick, T., Karabanow, J., Hughes, J., & Barbic, S. (2016). A mixed methods of recently homeless youth efforts to sustain housing and stability. *Child and Adolescent Social Work Journal*, 33, 207-218.
- Linehan, M. (2014). *DBT Skills Training Manual Second Edition*. New York: The Guilford Press.
- Milburn, N., Rice, E., Rotheram-Borus, M., Mallett, S., Rosenthal, D., Batterham, P., May, S., Witkin, A., & Duan, N. (2009). Adolescents exiting homelessness over two years: the risk amplification and abatement model. *Journal of Research on Adolescence*, 19, 762-785.
- Public Health Agency of Canada. (2006). *Street Youth in Canada*. www.publichealth.gc.ca/sti
- Rew, L., & Horner, S. D. (2003). Personal strengths of homeless adolescents living in a high-risk environment. *Advances in Nursing Science*, 26, 90-101.
- Rosenthal, D., Rotheram-Borus, M.J., Batterham, P., Mallett, S., Rice, E., & Milburn, N.G. (2007). Housing stability over two years and HIV risk among newly homeless youth. *AIDS and Behavior*, 11, 831-841.
- Roy, E., Haley, N., Leclerc, P., Sochanski, B., Boudreau, J., & Boivin, J. (2004). Mortality in a cohort of street youth in Montreal. *Journal of the American Medical Association*, 292, 569-574.
- Roy, É., Haley, H., Boudreau, J-F., Leclerc, L., & Boivin, J-F. (2009). The challenge of understanding mortality changes among street youth. *The Journal of Urban Health*, 87, 95-101.
- Roy, E., Robert, M., Fournier, L., Vaillancourt, E., Vandermeerschen, J., & Boivin, J-F. (2014). Residential trajectories of street youth: the Montreal cohort study. *Journal of Urban Health. Online First*.
- Rush, B.R., Castel, S., Brands, B., Toneatto, T. & Veldhuizen, S. (2013). Validation and comparison of diagnostic accuracy of four screening tools for mental disorders in people with substance use disorders. *Journal of Substance Abuse Treatment*, 44(4), 375- 383.
- Sandelowski M. (1995) Focus on qualitative methods: sample size in qualitative research. *Research in Nursing and Health* 18, 179-183.

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- Sherbourne, C., & Stewart, A. (1991). The MOS social support survey. *Social Science and Medicine*, 32, 705-714.
- Skevington, S.M., Lofty, M., O'Connell, K.A., WHOQOL Group. (2014). The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. *Quality of Life Research*, 13, 299-310.
- Slesnick, N., Kang, M.J., Bonomi, A.E., & Prestopnik, J.L. (2008a) Six- and twelve-month outcomes among homeless youth accessing therapy and case management services through an urban drop-in center. *Health Services Research*, 43, 211–229.
- Slesnick, N., Bartle-Haring, S., Dashora, P., Kang, M.J., & Aukward, E. (2008b). Predictors of homelessness among street living youth. *Journal of Youth and Adolescence*, 37, 465–474.
- Slesnick, N., Dashora, P., Letcher, A., Erdem, G. & Serovich, J. M. (2009). A review of interventions for runaway and homeless youth: Moving forward. *Children and Youth Services Review*, 31, 732-742.
- Snyder, C.R., Harris, C., Anderson, J.R. Holleran S.A., Irving L.M., Sigmon S.T., Yoshinobu, L., Gibb, J., Langelle C., Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60(4): 570-85.
- Stergiopoulos, V., Gozdzik, A., O'Campo, P., Holtby, A., Jeyaratnam, J., & Tsemberis, S. (2014). Housing first: Exploring participants' early support needs. *BMC Health Services Research*, 14: 167.
- Tevendale, H.D., Comulada, W.S., & Lightfoot, M.A. (2011). Finding shelter: two-year housing trajectories among homeless youth. *Journal of Adolescent Health*, 49. 615–620.
- Unesco. (2014, July 4). *Street Children*. Retrieved from: <http://www.unesco.org/new/en/social-and-human-sciences/themes/fight-against-discrimination/education-of-children-in-need/street-children/>.
- Wagnild G.M. *The Resilience Scale user's guide for the US English version of the Resilience Scale and the 14-Item Resilience Scale (RS-14)*. Worden, MT: The Resilience Center. 2010.
- Yalom, I.D. & Leszcz, M. (2005). *The Theory & Practice of Group Psychotherapy*, 5th ed. N.Y.: Basic Books.